Recombinant AKAP1 protein (His tag)

Catalog Number	543308
Synonyms	A-kinase anchor protein 149 kDa; AKAP 149; Dual specificity A-kinase-anchoring protein 1; D-AKAP-1; Protein kinase A-anchoring protein 1; PRKA1; Spermatid A-kinase anchor protein 84; S-AKAP84
Species	Human
Expression System	E. coli
Accession	Q92667
Molecular Weight	Predictes a molecular mass of 34.68 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	607-903
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 607-903 aa (Q92667) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This recombinant protein product features a 297-amino acid fragment (residues 607-903) of human A-kinase anchor protein 1 (AKAP1), specifically encompassing its KH and Tudor domains. It serves as an essential tool for researchers investigating domain-specific functions in mitochondrial anchoring, protein kinase A regulation, and innate immunity mechanisms. A-kinase anchor protein 1 (AKAP1) is a multifunctional scaffold protein that anchors type I and II regulatory subunits of protein kinase A to the outer mitochondrial membrane. It plays a critical role in mitochondrial-mediated antiviral innate immunity and promotes the translocation of NDUFS1 into mitochondria to regulate Complex I activity of the mitochondrial respiratory chain. The protein localizes to the mitochondrion and mitochondrial outer membrane, where it coordinates signaling events crucial for cellular energy metabolism and immune defense pathways.